From: Rauscher, Jon
Sent: Thursday, September 21, 2017 4:45 PM
To: Mason, Steve; Smith, Monica
Subject: Chemical Screening with ASPECT TAGA and PHILIS
Attachments: Chemical Screening with ASPECT TAGA and PHILIS.docx

Chemical Screening with ASPECT, TAGA, and PHILIS

The U.S. EPA Airborne Spectral Photometric Environmental Collection Technology (ASPECT) is an airborne platform equipped with special chemical and radiological sensors and imagery technologies. It detects chemicals while collecting aerial photos and videos for situational awareness during an incident. The ASPECT flew 28 flights over 112 hours covering 134 Risk Management Plan (RMP) facilities, 456 drinking water plants and 105 waste water plants in support of the Hurricane Harvey response from 31 August 2017 – 11 September 2017. The screening level results from ASPECT were compared to the list of Texas Commission on Environmental Quality (TCEQ) short-term Air Monitoring Comparison Values (AMCVs). The screening data found no exceedances of the short-term AMCVs.

EPA deployed two Trace Atmospheric Gas Analyzer (TAGA) mobile laboratories to assist in response activities as a result of Hurricane Harvey. The TAGA is self-contained and is capable of real-time monitoring of outdoor air emissions. The TAGA lab monitored the ambient air in the vicinity of approximately 25 facilities in the impacted areas. The facilities ranged over 321 miles and the TAGA covered over 640 miles in conducting the air monitoring. No monitored readings exceeded the Texas Commission on Environmental Quality (TCEQ) Air Monitoring Comparison Values (AMCV) short-term screening levels.

Portable High-Throughput Integrated Laboratory Identification System (PHILIS) is a mobile laboratory that EPA used to screen floodwaters associated with the Arkema fire early in the response. Floodwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs). No VOCs or SVOCs were detected in the Arkema floodwater samples.